

ISSN 0024-6107

Journal of the London Mathematical Society

Second Series

Volume 71

2005

Edited by

Francis E. Burstall

John F. Toland

Executive Editor **Amanda Harper**

© London Mathematical Society 2005

Cambridge University Press

EDITORIAL ADVISORY BOARD

Algebra and representation theory

Professor S. KOENIG, University of Leicester

Algebraic combinatorics and finite group theory

Professor A. A. IVANOV, Imperial College of Science, Technology and Medicine

Algebraic geometry

Dr G. K. SANKARAN, University of Bath

Algebraic number theory

Dr A. F. JARVIS, University of Sheffield

Algebraic topology

Dr P. R. TURNER, Heriot-Watt University

Combinatorics and theoretical computer science

Professor C. J. MITCHELL, Royal Holloway, University of London

Complex analysis and potential theory

Dr T. F. CARROLL, University College Cork, National University of Ireland

Differential geometry and geometric analysis

Dr M. A. SINGER, University of Edinburgh

Discrete groups and topology

Professor I. J. LEARY, University of Southampton

Elementary and analytic number theory

Professor G. HARMAN, Royal Holloway, University of London

Ergodic theory and dynamical systems

Professor T. B. WARD, University of East Anglia

Finite groups

Professor R. A. WILSON, Queen Mary, University of London

Functional analysis

Dr M. C. WHITE, University of Newcastle upon Tyne

Functional analysis and operator theory

Professor C. J. K. BATTY, University of Oxford

Geometric partial differential equations

Dr P. M. TOPPING, University of Warwick

Infinite group theory

Professor M. P. F. DU SAUTOY, University of Oxford

Lie theory and representation theory

Professor A. PREMET, University of Manchester

Linear partial differential equations and spectral theory

Professor A. V. SOBOLEV, University of Sussex

Logic, analytic and algebraic geometry, theoretical computer science

Professor A. J. MACINTYRE, Queen Mary, University of London

Low-dimensional topology, geometry and discrete groups

Professor A. W. REID, University of Texas

Mathematical logic

Professor M. PREST, University of Manchester

Mathematical physics

Dr N. M. J. WOODHOUSE, University of Oxford

Nor-commutative algebra and quantum groups

Professor K. A. BROWN, University of Glasgow

Non-commutative geometry

Professor A. G. ROBERTSON, University of Newcastle upon Tyne

Non-linear analysis and differential equations

Professor J. R. L. WEBB, University of Glasgow

Non-linear partial differential equations and calculus of variations

Professor S. MÜLLER, Max Planck Institute for Mathematics in the Sciences, Leipzig

Number theory

Professor J. E. CREMONA, University of Nottingham

Ordinary differential equations

Dr C. J. CHRISTOPHER, University of Plymouth

Probability and stochastic analysis

Dr B. M. HAMBLY, University of Oxford

Real analysis and geometric measure theory

Professor M. CSÖRNYEI, University College London

Real analysis, potential theory and approximation theory

Professor S. J. GARDINER, University College Dublin, National University of Ireland

Real harmonic analysis

Dr J. R. WRIGHT, University of Edinburgh

Representation theory and homological algebra

Dr A. D. KING, University of Bath

Singularity theory and geometry

Professor V. V. GORYUNOV, University of Liverpool

Spectral geometry, partial differential equations and related problems in stochastic analysis

Professor M. VAN DEN BERG, University of Bristol

Topology and K-theory

Professor U. L. TILLMANN, University of Oxford



CONTENTS

BARTAL, YAIR, LINIAL, NATHAN, MENDEL, MANOR and NAOR, ASSAF, On metric Ramsey-type dichotomies	289
BIANCHI, GABRIELE, Matheron's conjecture for the covariogram problem	203
BJÖRNER, ANDERS, PEEVA, IRENA and SIDMAN, JESSICA, Subspace arrangements defined by products of linear forms	273
BLOMER, VALENTIN, Binary quadratic forms with large discriminants and sums of two squareful numbers II	69
BUNCE, LESLIE J. and PERALTA, ANTONIO M., The alternative Dunford-Pettis property, conjugations and real forms of C^* -algebras	161
CASNATI, G. and DEL CENTINA, A., The moduli spaces of bielliptic curves of genus 4 with more bielliptic structures	599
CHILL, R., FAŠANGOVÁ, E., METAFUNE, G. and PALLARA, D., The sector of analyticity of the Ornstein-Uhlenbeck semigroup on L^p spaces with respect to invariant measure	703
COLESANTI, ANDREA and HUG, DANIEL, Hessian measures of convex functions and applications to area measures	221
COSTARA, CONSTANTIN, The 2×2 spectral Nevanlinna-Pick problem	684
DE GIOVANNI, FRANCESCO and ROBINSON, DEREK J. S., Groups with finitely many derived subgroups	658
DEL CENTINA, A., see Casnati, G.	
DROSTE, MANFRED and GÖBEL, RÜDIGER, Uncountable cofinalities of permutation groups	335
DU PLESSIS, A. A., see Murolo, C.	
DUJELLA, ANDREJ and FUCHS, CLEMENS, Complete solution of a problem of Diophantus and Euler	33
EICK, BETTINA, Determination of the uniserial space groups with a given coclass	622
ERSHOV, M. V., The Nottingham group is finitely presented	362
FAŠANGOVÁ, E., see Chill, R.	
FUCHS, CLEMENS, see Dujella, Andrej	
GÖBEL, RÜDIGER, see Droste, Manfred	
GOTHEN, PETER B. and KING, ALASTAIR D., Homological algebra of twisted quiver bundles	85
GUO, ZHIMING, see Yu, Jianshe	
HAASE, MARKUS, Spectral mapping theorems for holomorphic functional calculi	723
HOLT, DEREK F., REES, SARAH, RÖVER, CLAAS and THOMAS, RICHARD M., Groups with context-free co-word problem	643
HUG, DANIEL, see Colesanti, Andrea	
IZUMIYA, S., PEI, D., ROMERO FUSTER, M. C. and TAKAHASHI, M., The horospherical geometry of submanifolds in hyperbolic space	779
JABŁOŃSKI, ZENON J. and STOCHEL, JAN, Subnormality and operator multidimensional moment problems	438
JIN, ZHIREN and LANCASTER, KIRK, Convergent rates for solutions of Dirichlet problems of quasilinear equations	415
KIEM, YOUNG-HOON and WOOLF, JONATHAN, Intersection cohomology of symplectic quotients by circle actions	531
KING, ALASTAIR D., see Gothen, Peter B.	
KORENBLUM, BORIS and ZHU, KEHE, Complemented invariant subspaces in Bergman spaces	467
LANCASTER, KIRK, see Jin, Zhiren	
LEDYAEV, YU. S. and ZHU, Q. J., Multidirectional mean value inequalities and weak monotonicity	187
LIEBECK, MARTIN W. and SEITZ, GARY M., Maximal subgroups of large rank in exceptional groups of Lie type	345
LINIAL, NATHAN, see Bartal, Yair	
LÓPEZ POUSO, RODRIGO, Necessary and sufficient conditions for existence and uniqueness of solutions of second-order autonomous differential equations	397
MÂNTOIU, MARIUS, Abelian C^* -algebras which are independent with respect to a filter	740

CONTENTS

MASON, A. W. and SCHWEIZER, ANDREAS, The minimum index of a non-congruence subgroup of SL_2 over an arithmetic domain. II: The rank zero cases	53
MENDEL, MANOR, see Bartal, Yair	
METAFUNE, G., see Chill, R.	
MOROZOV, A. and NIES, A., Finitely generated groups and first-order logic	545
MUROLO, C., DU PLESSIS, A. A. and TROTMAN, D. J. A., Stratified transversality via time-dependent vector fields	516
NAOR, ASSAF, see Bartal, Yair	
NEWELSKI, LUDOMIR and PETRYKOWSKI, MARCIN, Coverings of groups and types	1
NIES, A., see Morozov, A.	
PALLARA, D., see Chill, R.	
PEEVA, IRENA, see Björner, Anders	
PEI, D., see Izumiya, S.	
PERALTA, ANTONIO M., see Bunce, Leslie J.	
PETYKOWSKI, MARCIN, see Newelski, Ludomir	
PIERCE, L. B., The 3-part of class numbers of quadratic fields	579
PINTO, A. A. and RAND, D. A., Rigidity of hyperbolic sets on surfaces	481
PREST, MIKE, Ideals in mod- R and the ω -radical	321
PUNINSKI, GENA and ROTHMALER, PHILIPP, Pure-projective modules	304
RAND, D. A., see Pinto, A. A.	
REES, SARAH, see Holt, Derek F.	
RIPPON, P. J. and STALLARD, G. M., Dimensions of Julia sets of meromorphic functions	669
ROBINSON, DEREK J. S., see de Giovanni, Francesco	
ROMERO FUSTER, M. C., see Izumiya, S.	
ROTHMALER, PHILIPP, see Puninski, Gena	
RÖVER, CLAAS, see Holt, Derek F.	
SAITO, TOSHIO, Scharlemann-Thompson invariant for knots with unknotting tunnels and the distance of (1,1)-splittings	801
SAMEI, EBRAHIM, Approximately local derivations	759
SCHWEIZER, ANDREAS, see Mason, A. W.	
SEDYKH, V. D., On the topology of singularities of the set of supporting hyperplanes of a smooth submanifold in an affine space	259
SEITZ, GARY M., see Liebeck, Martin W.	
SIDMAN, JESSICA, see Björner, Anders	
SILHOL, ROBERT, A functional relation for accessory parameters for genus 2 algebraic curves with an order 4 automorphism	133
SMITH, IVAN, Symplectic four-manifolds and conformal blocks	503
SMITH, M. P., Testing Schatten class Hankel operators and Carleson embeddings via reproducing kernels	172
STALLARD, G. M., see Rippon, P. J.	
STOCHEL, JAN, see Jabłoński, Zenon J.	
TAKAHASHI, M., see Izumiya, S.	
THOMAS, RICHARD M., see Holt, Derek F.	
TROTMAN, D. J. A., see Murolo, C.	
WALTERS, PETER, Regularity conditions and Bernoulli properties of equilibrium states and g -measures	379
WERNER, IVAN, Contractive Markov systems	236
WILSON, JOHN S., On the growth of residually soluble groups	121
WOJCIECHOWSKI, JERZY, Infinite matroidal version of Hall's matching theorem	563
WOJCIECHOWSKI, JERZY, On the length of snakes in powers of complete graphs	22
WOOLF, JONATHAN, see Kiem, Young-Hoon	
YEKUTIELI, AMNON and ZHANG, JAMES J., Multiplicities of indecomposable injectives	100
YU, JIANSHE, GUO, ZHIMING and ZOU, XINGFU, Periodic solutions of second order self-adjoint difference equations	146
ZHANG, JAMES J., see Yekutieli, Amnon	
ZHU, KEHE, see Korenblum, Boris	
ZHU, Q. J., see Ledyayev, Yu. S.	
ZOU, XINGFU, see Yu, Jianshe	